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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,128	07/17/2006	Dominique Quesselaire	09669/092001	1798

22511 7590 08/05/2010
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EXAMINER

COPPOLA, JACOB C

ART UNIT	PAPER NUMBER
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3621

NOTIFICATION DATE	DELIVERY MODE
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08/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/586,128	Applicant(s) QUESSELAIRE ET AL.	
	Examiner JACOB C. COPPOLA	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13,14,16-19 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13,14,16-19 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. This Office action is in reply to Applicants' response filed on 18 May 2010 ("2010 May Response").
2. Claims 13, 14, 16-19, and 28-30 are currently pending and have been examined.
3. This Office Action is given Paper No. 20100721. This Paper No. is for reference purposes only.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1), MPEP §608.01(o) and MPEP §2181.

Correction of the following is required:

- a. The "an external port configured to connect to a human interface module comprising a second keypad and a card reader" of claim 13;
- b. The "a subscriber identity module (SIM) card comprising a scheduler programmed to process the transaction" of at least claim 13;
- c. The "receiving encrypted payment card data and an amount from the human interface module" of at least claim 13;
- d. The "wherein the card reader is configured to read a payment card to obtain payment card data from the payment card" of at least claim 13;
- e. The "wherein the human interface module is configured to encrypt the payment card data for secure communication with the scheduler" of at least claim 13;

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- f. The “decrypting the encrypted payment card data” of at least claim 13; and
- g. The “communicating the payment card data and the amount to a virtual terminal server” of at least claim 13.

5. The Examiner notes that the USPTO’s Board of Patent Appeals and Interferences (“Board”) has recently recognized that the lack of antecedent basis of claim terms in the original specification as a “significant problem.” See 73 Fed. Reg. 32944 (June 10, 2008) (noting that “[o]ne significant problem faced by the Board under Rule 41.37(c)(1)(v) occurs when the language of a claim does not have direct antecedent language in the specification.”).

6. Additionally, the Examiner notes that patent examiners have no authority to waive the provisions of a rule. See *In re Goodman*, 3 USPQ2d 1866, 1871 (ComrPats 1987) noting the examiners have no authority to waive 37 C.F.R. §1.111(b).

7. Because the lack of antecedent basis is currently recognized by the USPTO as a significant problem and because the Examiner has no authority to waive the provisions of a rule, correction of the noted objections to the specification under 37 C.F.R. § 1.75(d)(1) is required.

Claim Rejections - 35 USC §112, First Paragraph

8. The following is a quotation of the first paragraph of 35 U.S.C. §112:

(a) The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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9. Claims 13, 14, 16-19, and 28-30 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The claims are replete with errors, a few examples follow.

10. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding Claims 13, 14, 16-19, and 28-30

11. Claim 13 recites “A mobile device comprised in a merchant transaction terminal comprising... an external port configured to connect to a human interface module...” (emphasis added).

12. The Examiner has carefully searched the original disclosure and cannot find a description of the claimed “external port” (as a component of either the claimed “mobile device” or “merchant transaction terminal”) in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

13. The closest support found by the Examiner is on p. 3, ll. 23-24 of the written description. Here the written description recites “The hosting means HT is connectable to the human interface module SPED through connection means C1.”

14. However, the Examiner finds that “connection means C1” is not necessarily an external port, as the connection means C1 could be an internal port or a direct wired connection.

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15. Claim 13 recites:

a subscriber identity module (SIM) card comprising a scheduler programmed to process the transaction, wherein processing the transaction comprises:

receiving encrypted payment card data and an amount from the human interface module, wherein the second keypad is configured to receive input of the amount of the transaction, and wherein the card reader is configured to read a payment card to obtain payment card data from the payment card, and wherein the human interface module is configured to encrypt the payment card data for secure communication with the scheduler,

decrypting the encrypted payment card data, and

communicating the payment card data and the amount to a virtual terminal server.

16. The Examiner has carefully searched the original disclosure and cannot find a description of the claimed "SIM card" in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

17. The closest support found by the Examiner is on p. 3, ll. 21-23 and p. 4, ll. 1-23. Here the written description recites:

The security module ES is comparable to a Subscriber Identity Module SIM card as currently used in the field of mobile telephony. See p. 3, ll. 21-23 (emphasis added).

The transaction phases comprises the entry of the amount to be paid with the keypad KP, reading and authentication of the bank or credit card through the card reader CR and the processing means MP, entry of the PIN code through the keypad KP, displaying of the instruction to be followed on the display D, possibly editing of payment ticket with the printer P. The human interface module SPED executes these transaction phases under the e-scheduler ES control. However, the human interface module SPED executes totally autonomously the treatments regarding security (display the message asking for PIN code entry, entry of the PIN code, presentation of the PIN code to the card, generation of the ciphered PIN data). See p. 4, ll. 1-10 (emphasis added).

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The communication between the human interface module SPED and the e-scheduler ES through the mobile phone is secured by ciphered data exchange. See p. 4, ll. 11-14 (emphasis added).

In an analogous way, the communication between the virtual terminal server VTS and the e-scheduler ES through the mobile phone HT and the telecommunication network TN is secured by mutual identification proceeding and the used of cryptographic keys. See p. 4, ll. 15-17 (emphasis added).

18. However, the Examiner finds that “[t]he security module ES” on p. 3 of the written description (which appears to be the claimed “scheduler”) is not necessarily a component of a SIM card, as the security module ES is only disclosed as “comparable to a ... SIM card....” Thus, there is at least no support for the claimed “SIM card comprising a scheduler....”

19. Moreover, the Examiner finds that “encrypted payment card data” is not necessarily present in the citations above or in any other portions of the original disclosure. Thus, there is at least no support for the claimed “encrypted payment card data.”

20. Moreover, the Examiner finds that neither of “[t]he security module ES” on p. 3 of the written description or “the e-scheduler ES” on p. 4 of the written description (which both appear to be the claimed “scheduler”) is necessarily having programming to process a transaction, the processing comprising: 1) receiving encrypted payment card data, 2) decrypting the encrypted payment card data, or 3) communicating the payment card data to a virtual terminal server.

Therefore, the claimed “SIM card” is not described in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed “SIM card comprising a scheduler... programmed to process the transaction, wherein the processing the transaction comprises: receiving encrypted payment card data... decrypting the encrypted payment card data, and communicating the payment card data....”

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21. Moreover, the Examiner finds that the “SPED” on p. 4 (which appears to be the claimed “human interface module”) is not necessarily configured to encrypt payment card data for secure communication with either of the “[t]he security module ES” on p. 3 of the written description or “the e-scheduler ES” on p. 4 of the written description. Thus, there is no support for the claimed “the human interface module is configured to encrypt the payment card data for secure communication with the scheduler.”

22. The analysis directly above regarding the “SIM card” can be equally applied to claim 29.

Claim Rejections - 35 USC §112, Second Paragraph

23. The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

24. Claims 13, 14, 16-19, and 28-30 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The claims are replete with errors, a few examples follow.

Regarding Claims 13, 14, 16-19, and 28-30

25. Claim 13 recites “A mobile device comprised in a merchant transaction terminal comprising....” Claim 13 is indefinite because it is unclear whether the “comprising” refers to the “mobile device” or the “merchant transaction terminal.”

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26. Claim 13 recites “A mobile device comprised in a merchant transaction terminal comprising... an external port configured to connect to a human interface module...” (emphasis added). The recitation of “external port” suggests that the port is external to either of the “mobile device” or the “merchant transaction terminal.” Therefore, claim 13 is indefinite because it is unclear how the mobile device (or merchant transaction terminal) *comprises* a port (*i.e.*, the port is internal to the mobile device) that is *external* to the mobile device.

27. Claim 13 recites “an external port configured to connect to a human interface module comprising a second keypad and a card reader.” Claim 13 is indefinite because it is unclear whether “comprising” refers to the “external port” or the “human interface module.”

28. Claim 13 recites “A mobile device comprised in a merchant transaction terminal comprising... an external port configured to connect to a human interface module comprising a second keypad and a card reader....” Claim 13 is indefinite because the scope of claim 13 is unclear. One of ordinary skill in the art would not understand whether Applicants are claiming the combination of “[a] mobile device” and “a merchant transaction terminal,” the combination of “[a] mobile device,” “a merchant transaction terminal,” and “a human interface module,” or the subcombination of “[a] mobile device.”

29. Claim 13 recites:

a scheduler programmed to process the transaction, wherein processing the transaction comprises ... wherein the second keypad is configured to receive input of the amount of the transaction, and wherein the card reader is configured to read a payment card to obtain payment card data from the payment card, and

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wherein the human interface module is configured to encrypt the payment card data for secure communication with the scheduler.

30. Claim 13 is indefinite because it is unclear how the programming for processing a transaction of the scheduler could comprise “wherein the second keypad is configured to receive input...” or “wherein the card reader is configured to read a payment card...” at least because these elements seem to be directed to the configuration of the “human interface module” not to the programming of the scheduler.

31. The analysis directly above can be equally applied to claim 29.

32. Claim 13 recites “encrypted payment card data.” Claim 13 is indefinite because one of ordinary skill in the art would not be able to determine the metes and bounds of this element (*e.g.*, what constitutes “encrypted payment card data”).

33. The analysis directly above can be equally applied to claim 29.

34. Claim 29 recites:

A subscriber identity module (SIM) card configured to connect to a port of a mobile device comprising a first keypad ... wherein the human interface module comprises a second keypad and a card reader, wherein the second keypad located on the human interface module is configured to receive input of the amount of the transaction, and wherein the card reader is configured to read a payment card to obtain payment card data from the payment card, and wherein the human interface module is configured to encrypt the payment card data for secure communication with the scheduler.

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35. Claim 29 is indefinite because it is unclear whether Applicants are claiming the subcombination of a “SIM card” or the combination of a “SIM card,” “a mobile device,” and a “human interface module.”

36. Claim 29 recites “the human interface module.” Claim 29 is indefinite because it is unclear to what this is referring.

37. Claim 30 recites “The SIM card of claim 28.” Claim 30 is indefinite because it is unclear whether this is referring to the SIM card of claim 13 (from which claim 28 depends) or to some other element of claim 28.

38. The Examiner finds that because the claims are indefinite under 35 U.S.C. §112, second paragraph, it is impossible to properly construe claim scope at this time. However, in accordance with MPEP §2173.06 and the USPTO’s policy of trying to advance prosecution by providing art rejections even though these claims are indefinite, the claims are construed and the prior art is applied as much as practically possible.

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Claim Rejections - 35 USC §103

39. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

40. Claims 13, 14, 16-19, and 28-30, as understood by the Examiner, are rejected under 35 U.S.C. §103(a) as being unpatentable over Wilkes et al. (U.S. 2005/0097015 A1) (“Wilkes”), in view of Goldthwaite et al. (U.S. 2004/0176134 A1) (“Goldthwaite”).

Regarding Claims 13, 14, 16-19, and 28-30

41. Wilkes discloses:

a first keypad; an external port configured to connect to a human interface module comprising a second keypad and a card reader; and a subscriber identity module (SIM) card to process a transaction, wherein processing the transaction comprises: receiving payment card data and an amount from the human interface module, wherein the second keypad is configured to receive input of the amount of the transaction, and wherein the card reader is configured to read a payment card to obtain payment card data from the payment card, and communicating the payment card data and the amount to a virtual terminal server (see at least ¶¶ 0037, 0053, 0054, 0060, 0062, 0065).

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42. Wilkes does not directly disclose that the SIM card comprises a scheduler programmed to process the transaction, wherein the human interface module is configured to encrypt the payment card data for secure communication, and decrypting the encrypted payment card data.

43. Goldthwaite teaches a SIM card (“SIM 126”) comprising a scheduler (“mobile transaction client application 125” – see ¶ 0027) to process a transaction by receiving and transmitting transaction data to a server.

44. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the SIM card of Wilkes to comprise a scheduler, as taught by Goldthwaite, to execute the transaction processing, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

45. Goldthwaite also teaches encrypted communication between two entities (¶¶ 0007 and 0027).

46. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the human interface module and SIM card of Wilkes to have encrypted communication, as taught by Goldthwaite, in order to provide secure communication between the two devices.

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Claim Interpretation

47. After careful review of the original specification, the Examiner is unable to locate any lexicographic definitions with the required clarity, deliberateness, and precision. See MPEP §2111.01 IV.

48. The Examiner finds that because the examined claims recite neither “step for” nor “means for,” the examined claims fail Prong (A) as set forth in MPEP §2181 I. Because the examined claims fail Prong (A) as set forth in MPEP §2181 I., the Examiner concludes that all examined claims do not invoke 35 U.S.C. §112, 6th paragraph. See also *Ex parte Miyazaki*, 89 USPQ2d 1207, 1215-16 (B.P.A.I. 2008)(precedential).

Response to Arguments

Prior Art

49. Applicants’ arguments filed in the 2010 May response have been fully considered but they are not persuasive. Because the scope of the examined claims cannot be properly construed at this time (see §112 second paragraph rejections above), it is impossible for the Examiner to assess the veracity of Applicants’ statements arguing why the claims distinguish over the prior art.

50. Applicants’ other arguments with respect to the examined claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

51. Applicants' amendment filed in the 2010 May Response necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

52. Because this application is now final, Applicants are reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by the Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has *not been addressed* with respect to other aspects of patentability (*e.g.* §101 patentable subject matter, §112, first paragraph written description and enablement, §112, second paragraph indefiniteness, and §102 and §103, prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

53. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

54. Applicants are respectfully reminded that any suggestions or examples of claim language provided by the Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. To be especially clear, any suggestion or example provided in this Office Action (or in any future office action) does *not* constitute a formal requirement mandated by the Examiner.

h. Should Applicants decide to amend the claims, Applicants are also reminded that—like always—no new matter is allowed. The Examiner therefore leaves it up to Applicants to choose the precise claim language of the amendment in order to ensure that the amended language complies with 35 U.S.C. §112, first paragraph.

i. Independent of the requirements under 35 U.S.C. §112, first paragraph, Applicants are also respectfully reminded that when amending a particular claim, all claim terms must have clear support or antecedent basis in the specification. See 37 C.F.R. §1.75(d)(1) and MPEP §608.01(o). Should Applicants amend the claims such that the claim language no longer has clear support or antecedent basis in the specification, an objection to the specification may result. Therefore, in these rare situations where the amended claim language does *not* have clear support or antecedent basis in the specification and to prevent a subsequent ‘Objection to the

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Specification' in the next office action, Applicants are encouraged to either (1) re-evaluate the amendment and change the claim language so the claims *do* have clear support or antecedent basis or, (2) amend the specification to ensure that the claim language does have clear support or antecedent basis. See again MPEP §608.01(o) (¶3). Should Applicants choose to amend the specification, Applicants are reminded that—like always—no new matter in the specification is allowed. See 35 U.S.C. §132(a). If Applicants have any questions on this matter, Applicants are encouraged to contact the Examiner via the telephone number listed below.

55. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to Jacob C. Coppola whose telephone number is (571) 270-3922. The Examiner can normally be reached on Monday-Friday, 9:00 a.m. - 5:00 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached at (571) 272-6779.

56. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/JACOB C. COPPOLA/
Patent Examiner, Art Unit 3621
July 22, 2010

/ANDREW J. FISCHER/
Supervisory Patent Examiner, Art Unit 3621